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云南虎耳草科新分类群

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New Taxa of Saxifragaceae from Yunnan

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1 **细虎耳草**　新种　图 1：1~4

Saxifraga pseudoparvula H. Chuang, sp. nov.

Species similis *S. parvulae* Engl. et Irmsch., sed plantis gracillimis, 3-6 cm altis; petiolis valde longioribus quam laminis; floribus minoribus erectis, petalis valde longioribus quam sepalis, sepalis 1-1.5 mm longis, petalis 1.5-2 mm longis differt.

Herba perennis gracilis, 3-6 cm alta. Rhizoma brevissimum, radices fibrillosas numerosas edens. Folia basalia pauca; laminae minimae, ovatae vel triangulato-ovatae, 3-5 mm longae, 2-4 mm latae, apice obtusae, basi cuneatae, margine pauci-serra-tae, supra dense pubescentes, subtus margineque glabrae, subcarnosae, nervis obscuris; petioli 5-10 mm longi, sparsim pubescentes, basi vaginati. Caulis florifer simplex, erectus, pubescens, circ. 0.5 mm orassus. Cyma 1-3-flora, saepe uniflora; bracteae lanceolato-lineares, 2-4 mm longae et 0.5-1 mm latae, apice obtusae, integrae, raro infernae 2-3 dentatae, sessiles; bracteolae parvae, subulatae; pedicelli erecti graciles pubescentes, 0.7-1.4 cm longi. Flores actinomorphi; sepala 5, sub anthesi reflexa, ovata vel triangulato-ovata, 1-1.5 mm longa, 0.5-1 mm lata, obtusa, extra glabra vel sparsim pubescentia, intra glabra, crassiuscula; petala 5, alba elliptica, 1.5-2 mm longa, obtusa, basi in unguem brevissimum subito contracta, crassiuscula; stamina 10, filamentis clavatis petalis subaequilongis; ovarium subsuperum ovoideum, breviorum quam stamen, 2 carpellis ad 1/3 connatis superne divaricaris, stylis brevioribus, stigmatibus nimoribus. Capsula oblongo-ovoidea circ. 4 mm longa, superne 1/3 divaricata.

云南 (Yunnan): 鹤庆 (Heqing), 秦仁昌 (R. C. Ching) 24128, ad rupes, alt. 3800 m, fl. fr., 1939. 8. 29. (Typus! KUN); 碧江 (Bijiang, 现属福贡), 蔡希陶 (H. T.

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Tsai）58206。

分布于鹤庆、福贡，生于海拔3 800～4 700 m的山顶石崖上。

本种近微虎耳草 *S. parvula* Engl. et Irmsch. 但本种植株极纤细，高3～6 cm，叶柄明显比叶片长；花小，直立，花瓣明显长于萼片，萼片长1～1.5 mm，花瓣长1.5～2 mm。后者植株高1.5～2 cm，叶柄与叶片近等长或较短；花较大，下垂，花瓣与萼片近等长或较短，萼片3.5～4.5 mm，花辨长3.5～4 mm。

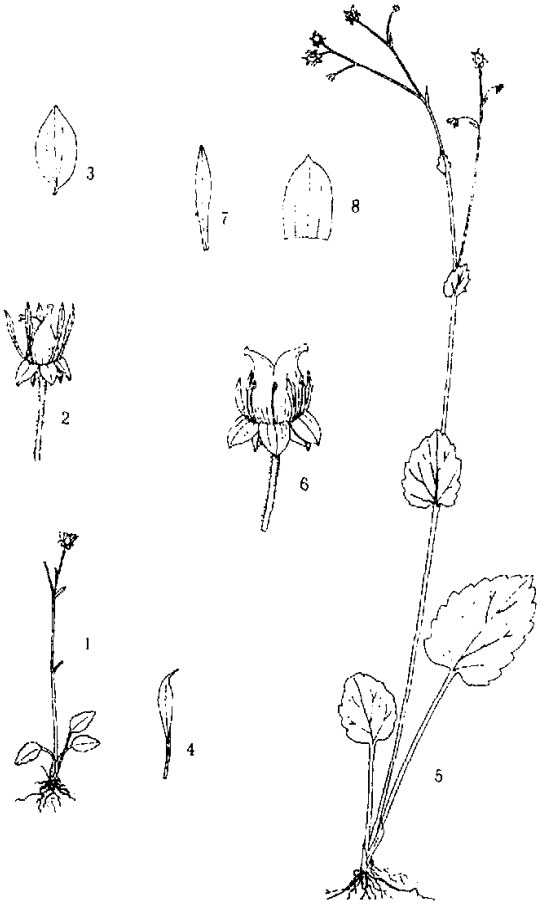

图1. 1～4. 细虎耳草 *Saxifraga psoudoparvula* H. Chuang
1. 植株，2. 花，3. 花瓣，4. 雄蕊；5～8. 奔子栏虎耳草 *S. benzilanensis* H. Chuang，5. 植株，6. 花，7. 花瓣，8. 萼片。（吴锡麟绘）

2 奔子栏虎耳草 新种 图1：5～8

Saxifraga benzilanensis H. Chuang, sp. nov.

Species *S. lumpuensi* Engl. affinis, sed foliis basalibus et bracteis inferioribus basi cordatis obliquisque; bracteis ovatis, infimis ad 2.3 cm longis; inflorescentiis 8 – 15 cm longis, ramis 5 – 10 cm longis; petalis apice obtusis sepalis subaequilongis; staminibus petalis subaequilongis vel brevi oribus inter alia differt.

Herba perennis 15 – 25 cm alta. Rhizoma brevius, radices fibrillosas numerosas edens. Folia basalia pauca, laminis ovatis vel lateovatis, 1.5 – 3 cm longis, 1.2 – 2.5 cm latis, apice orbiculatis vel obtusis, basi cordatis saepe obliquis, margine crenatis, supra viridibus et crispule albo – pilosis, subter viridulis glabris, petiolis 2 – 5 cm longis, anguste alatis, glabris. Caules floriferi simplices, tenelli, 1 – 1.5 mm crassi, crispule albo – pilosi. Panicula 8 – 15 cm longa, ramis 5 – 10 cm longis, parce crispule albo – pilosis; bracteae ovatae infimae ad 2.3 cm longae 1.5 cm latae, ad apicem versus sinsim angustatae et minuentes, apice obtusae vel acutae, basi cordatae, supra crispule albo – pilosae, subtus glabrae, margine crenato – serratae, omnino sessiles; bracteolae sublatae purpurascentes; pedicelli tenelli, 0.5 – 1.5 cm longi, crispule albo – pilosi. Flores actinomorphi parvi; sepala 5, viridi – purpurea, sub anthesi reflexa, ovata vel lateovata, 1.2 – 2 mm longa, 0.8 – 1.5 mm lata, apice obtusa vel acuta, glabra, 3 – 5 – nerves; petala 5, alba vel roseola, anguste elliptica vel anguste lanceolata, 1.5 – 2 mm longa, circ. 0.5 mm lata, obtusa, uninervia; stamina 10, petalis aequilonga vel breviora, filamentis linearibus, antheris ovoideis; ovarium subsuperum, ovoideum, sepalis aequilongum, 2 carpellis superne liberis inferne conntis, stylis brevioribus, stigmatibus capitatis. Capsula ovoidea circ. 3 mm longa, superne divaricata.

云南 (Yunnan): 德钦 (Deqen), 青藏队 (Qinghai – Xizang Exp.) 1851, in sylvis picetis ad rupes alt. 3200 m. fl. fr., 1981. 7.6. (Typus! KUN)。

分布于云南德钦，生于海拔 3 200 m 的云杉林下沟谷水边石上。

本种近道孚虎耳草 *S. lumpuesis* Engl. 但本种基生叶片和下部苞片基部心形，偏斜；苞片卵形，最下部者长达 2.3 cm；花序长 8 ~ 15 cm，分枝长 5 ~ 10 cm；花瓣先端钝，与萼片近等长，雄蕊与花瓣近等长或稍短。后者基生叶基部楔形；苞片长圆形，下部者长约 1 cm；花序和分枝远较短；花瓣先端极尖，比萼片长 2 ~ 2.5 倍；雄蕊比花瓣短 2 倍。

3 **拟繁缕虎耳草** 新种 图 2：1 ~ 4

Saxifraga habaensis C. Y. Wu, sp. nov.

Species *S. stellariifoliae* Franch. arcte affinis, sed haud caespitosis, caule simplici 5 – 7 cm alto; laminis minoribus, utrimque villosis, margine dense longiciliatis; floribus solitariis terminatis majoribus, sepalis 4 – 5 mm longis, petalis 6 – 7 mm longis differt.

Herba perennis 5 – 7 cm alta. Rhizoma brevius, radices fibrillosas numerosas edens. fibris ad 10 cm longis vix 0.5 mm crassis, in sicco atrobrunneis. Caules simplices singuli, erecti interdum curvati, crispule ferrugineo – villosi et apice miscelle glanduloso – pilosi. Folia basalia marcida sub anthesi; caulina numerosa subaequilonga; laminis ovatis vel anguste ovatis, 4 – 7 mm longis, 3.5 – 5.5 mm latis, apice acutis vel obtusis, basi orbiculatis vel trancatis vel late cuneatis, utrinque ochraceo – villosis, margine integris et dense longiciliatis, basinervis 3 – 7 gracillimis inconspicuis, omnino petiolis 0.2 – 1.2 cm longis, ab imo ad summum tarde abbreviatis, alatis, sparsim longe

图2 1~4. 拟繁缕虎耳草 *Saxifraga habaensis* C. Y. Wu
1. 植株，2. 花，3. 花瓣，4. 茎生叶；5~8. 东川虎耳草 *S. dongchuanensis* H. Chuang，5. 植株部分，6. 花，7. 花瓣，8. 茎生叶。（李锡畴绘）

ochraceo – ciliatis. Flores solitarii actinomorphi; pedicelli erecti 0.5 – 1 cm longi, dense breviter nigrescenti – glandulosos – pilosi; sepala 5, sub anthesi reflexa, ovato – oblonga 4 – 5 mm longa 2 – 2.5 mm lata, apice obtusissima, glabra vel sparsim brevi – ciliata, 3 – nervia gracillima; petala 5, flavissima, elliptica 6 – 7 mm longa 2.5 – 3 mm lata, apice orbiculata basi in unguem brevissimum contracta, 3 – nervia; stamina 10, 4 – 5 mm longa, filamentis subulatis, antheris ovatis; ovarium late ovoideum, paulo breviorum quam stamina, 2 carpellis ad superne connatis, stylis brevioribus, stigmatibus majoribus. Capsula ignota.

云南 (Yunnan): 中甸哈巴 (Zhongdian Haba), 冯国楣 (K. M. Feng) 2155, fl., 23. Aug. 1939. (Typus! KUN)。

产于云南西北部的中甸哈巴雪山，生于山坡上。

本种体态极近繁缕虎耳草 *S. stellariifolia* Fr.，但本种不丛生，茎单一，高 5～7 cm；叶片较小，两面被长柔毛，边缘密生长缘毛；花单个顶生，较大，萼片长 4～5 mm，花瓣长 6～7 mm。后者茎丛生，高约 15 cm；叶片较大，除表面散生柔毛外，其余无毛；花排列成伞房状花序，较小，分布于四川西部。

4　**东川虎耳草**　新种　图 2：5～8

Saxifraga dongchuanensis H. Chuang, sp. nov.

Proxima *S. habaensi* C. Y. Wu, a qua differt plantis 10－15 cm altis; laminis rhombeis vel ovato－rhombeis, utrimque glabris, margine modo apice pauci－glanduloso－ciliatis; sepalis sub anthesi haud reflexis; petalis 5－nerviis.

Plantae 10－15 cm altae. Radix et basis plantae ignota. Caules erecti graciles, vix 1mm crassi, simplices, purpurascentes, sparsim brunneo－glanduloso－pilosi. Folia caulina numerosa conferta subaequilonga; laminae rhombeae vel ovtao－rhombeae 3－6 mm longae 3－4 mm latae, apice obtusae 1－2 aristatae, basi cuneatae, utrimque glabrae, margine integrae, modo apice pauci－glanduloso－ciliatae, 3－7－basinerviae, nervis gracillimis inconspicuis; petioli 2－5 mm longi, complanati, sparsim brunneo－glanduloso－ciliati, ad axillas foliorum pilis paucis brunneis crispulis glanduloso－pilosis instructi. Flores solitarii actinomorphi; pedicelli erecti 0.3－1.5 cm longi, pilis sparsis brunneis glanduloso－pilosis obsiti. Sepala 5, sub anthesi haud reflexa, longi－ovata 4－5 mm longa circ. 2mm lata, obtusa, extus sparsim pilosa, margine ciliata, 3－nervia; petala 5, alba (ex collectore), elliptica 6－7 mm longa circ. 4mm lata. apice obtusa, basi unguiculata circ. 1mm longa, 5－nervia; stamina 10, circ. 5mm longa, filamentis subulatis, antheris subcordatis; ovarium oblongo－ovatum circ. 4 mm longum, 2 carpellisad superne connatis, stylis crassis circ. 1 mm longis, stigmatibus majoribus. Capsula metura ignota.

云南 (Yunnan)：东川 (Dongchuan)，杨崇仁 (C. R. Yang) 75－12A, in pratis udis, Slt. 3500 m. fl. 1975. 9. 10. (Typus! KUN)。

产于云南东川，生于海拔 3 500 m 附近的潮湿草坡。

近拟繁缕虎耳草 *S. habaensis* C. Y. Wu，但本种高 10～15 cm；叶片菱形成卵状菱形，两面无毛，边缘仅先端具少数腺缘毛；萼片在花期不反折；花瓣具 5 脉。

5　**哈巴虎耳草**　新变种

Saxifraga macrostigmatoides Engl. var. ***habaensis*** H. Chuang, var. nov.

A typo differt foliis caulinis linearibus vel lanceolato－linearibus 5－8 mm longis 1－1.5 mm latis; sepalis glabris.

云南 (Yunnan)：中甸 (Zhongdian)，哈巴 (Haba)，中甸队 (Zhongdian Exp.) 1809, in fissuris rupium calcareum, alt. 4 300－4 600 m. fl. 1962. 9. 1. (Typus! KUN).

产于云南西北部中甸哈巴，生于海拔 4 300～4 600 m 的石灰石缝中。

与原变种的区别是茎生叶线形或披针状线形，长 5～8 mm，宽 1～1.5 mm；萼片无毛。原变种茎生叶长圆形，长 6～7 mm，宽 2～2.5 mm；萼片下部密被腺毛。

6　**菖蒲桶虎耳草**　新种　图 3：1～5

Saxifraga champutungensis H. Chuang, sp. nov.

Species S. *hypericoidi* Franch. similis, a qua differt caulibus rubris, foliis utrinque glabris; sepalis dorso glabris, margine fimbriato - breviglandulosis, floribus aureolinis, petalis 6 - 7 mm longis 3 - 4.5 mm latis, haud callis ornatis.

Herba perennis, 8 - 10 cm alta. Radix fibrosa numerosa linearis, in sicco atrobrunnea. Caules erecti caespitosi rubri, sparsim ferrugineo - villosi, superne sparsim breviter glanduloso - pilosi, dense foliati. Folia basalia et inferne caulina anguste oblanceolata 2 - 4 mm longa, longipetiolata, supra media anguste oblanceolata vel lineari - oblanceolata 4 - 10 mm longa 1.5 - 2.5 mm lata, sessilia, omnino apice acuta etiam aristato - mucronata, basi cuneota, utrinque glabra, margine integra spersim ferrugineo - ciliata, in axillis foliorum ferrugineo - villosa. Flores 1 - 3, terminati, actinomorphi; pedicelli erecti 1 - 2.5 cm longi, pilis breviglandulosis nigrescentibus obsiti. Sepala 5, sub anthesi erecta, ovata 2.5 - 3 mm longa 1.5 - 2 mm lata, extus glabra, margine ciliis fimbriatis breviglandulosis obsita; petala 5, aureolina obovato - oblonga 6 - 7 mm longa 3 - 4.5 mm lata, apice obtusa, basi in breviter unguem subito contracta, 3 (- 5) - nervia; stamina 10, sepalis longiora, filamentis subulatis, antheris parvis; ovarium subsupernum ovoideum, stamine paullo brevius, 2 carpallis ad supra connatis, stylis brevioribus paullo divergentibus, stigmatibus minoribus. Capsula ignota.

云南 (Yunnan): 贡山 (Gongshan), 菖蒲桶 (Chang - pu - tong), 冯国楣 (K. M. Feng) 7723, in fissuris rupium, alt. 3 700 ~ 4 000 m. fl. 1940. 9. 15. (Typus! KUN).

产于云南贡山县菖蒲桶，生于海拔3 700 ~ 4 000 m的岩坡石缝中。

本种近多花虎耳草 S. *hypericoides* Franch.，但茎红色，叶片两面无毛，萼片外面无毛，边缘被流苏状短腺毛，花瓣金黄色，长6 ~ 7 mm，宽3 ~ 4.5 mm，无痂体等与之区别。后者茎不带红色，叶片两面被毛，萼片外面被腺毛，边缘无毛，花瓣黄色，长4 ~ 5.3 mm，宽1.7 ~ 2 mm，基部具不明显的2痂体。

7 **大海虎耳草** 新种 图3: 6 ~ 10

Saxifraga dahaiensis H. Chuang, sp. nov.

Species similis S. *macrostigmatoidi* Engl., sed caulibus sparsim et pedicellis dense villosis, pilis ferrugineis gracillimis crispatis eglandulosis ornatis; laminis modo margine sparsim albo - hispidis; pedicellis bravissimis, 1 - 2mm longis; sepalis glabris differt.

Herba perennis 3 - 6 cm alta. Radix fibrosa numerosa linearis, in sicco brunnea. Caules erecti, caespitosi, villosi, pilis ferrugineis gracillimis crispatis eglandulosis sparsim tecti, toti dense foliati. Folia inferne caulina anguste ovata vel anguste elliptica, 2 - 3 mm longa, 1 - 2 mm lata, utrinque glabra, margine sparsim albo - hispida, petiolis 2 - 3 mm longis, supera media lanceolata vel anguste ovata 4 - 7 mm longa 1.5 - 2.5 mm lata, apice acuta, basi late cuneata, utrinque glabra, margine integra revoluta sparsim albo - hispida, sessiles, in axillis foliorum ferrugineo - villosa. Flores solitarii, actinomorphi; pedicelli brevissimi 1 - 2 mm longi dense villosi, pilis ferrugineis gracillimis crispatis eglandulosis tecti; sepala 5, in anthesi erecta, oblonga 2.5 - 3 mm longa, circ. 1.5 mm lata, apice obtusissima, glabra, trinervia, nervis sub apice confluentibus; petala 5, flava, late elliptica, 4.5 - 5.5 mm longa 3 - 3.5 mm lata, apice obtusissima, basi in breviter unguem

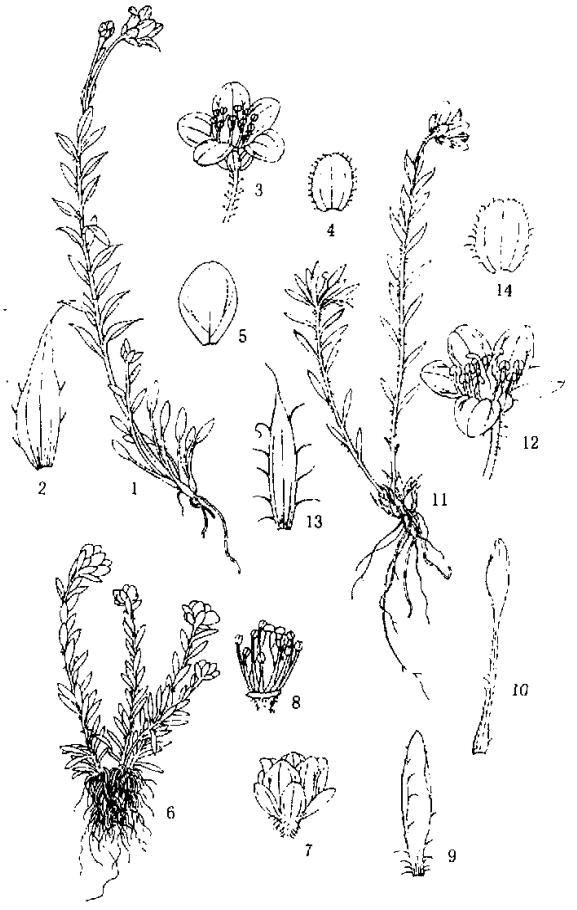

图3　1~5. 昌藩桶虎耳草 *Saxifraga champutungensis* H. Chuang
1. 植株，2. 茎生叶，3. 花，4. 萼片，5. 花瓣；6~10. 大海虎耳草 *S. dahaiensis* H. Chuang，6. 植株，7. 花，8. 雌蕊和雄蕊，9. 茎上部叶，10. 茎下部叶；11-14. 碧江虎耳草 *S. bijiangensis* H. Chuang，11. 植株，12. 花，13. 茎生叶，14. 萼片。（肖溶绘）

abrupte angustata, quinquinervia; stamina 10, sepalis aequilonga, filamentis subulatis, antheris minimis; ovarium subsuperum, ovoideum circ. 2 mm longum, stylis brevioribus et crassis, stigmatibus capitatis.

云南（Yunnan）：会泽（Huize），大海（Dahai），滇东北组（Yunnan Sept. - Orint. Exp.）228, in pratis, alt. 3 700 m. fl. 1964. 7.21.（Typus! KUN）.

产于云南东北部会泽县的大海，生于海拔3 700 m附近的草地。

本种近假大柱头虎耳草 *S. macrostigmatoides* Engl.，但本种茎疏生、花梗密生锈色极

细长的卷曲柔毛，绝无腺毛；叶片仅边缘疏生白色刚毛；花梗极短，长 1～2 mm；萼片无毛。该种茎上部、花梗、萼片被黑色腺毛，叶片被腺缘毛，花梗长 8～13 mm。

8 **碧江虎耳草** 新种 图3：11～14

Saxifraga bijiangensis H. Chuang, sp. nov.

Species pedicellis ferrugineo－villosis et petalis 5－nerviis cum *S. dahaiensi* H. Chuang optime congruens, sed differt pedicellis ad 1cm longis; sepalis margine fimbriato－ciliatis; petalis ellipticis 7－9 mm longis; laminis anguste lanceolatis margine ferrugineo－longiciliatis, conspicue 3 (－5)－nerviis.

Herba perennis, 10－12 cm alta. Radix fibrosa numerosa linearis, in cicco nigrescens. Caules erecti caespitosi rubri, pilis ferrugineis longi－gracillimis crispatis obsiti, dense foliati. Folia anguste lanceolata, 8－10 mm longa, 1.5－2.5 mm lata, apice acuta, mucronata circ. 1mm longa, basi cuneota, utrimque glabra, margine integra, ciliis ferrugineis longi－gracillimis crispatis sparsim obsita, subtus 3(－5)－nerva conspicua, supera sessilia infera petiolata. Flores solitarii, actinomorphi, pedicellis erectis circ. 1cm longis pilis ferrugineis longi－gracillimis crispatis dense obsiti. Sepala 5, sub anthesi erecta, oblonga 3－4 mm longa 2－2.5 mm lata, apice obtusa, extus glabra, margine anguste membranacea et fimbriatao－ciliata, trinervia, nervis sub apice non congluentibus; petala 5, flava, oblonga 7－9 mm longa 4－4.5 mm lata, apice obtusa, basi breviter unguiculata, 5－nervia; stamina 10, 4－5 mm longa, filamentis subulatis, antheris parvis; ovarium subsuperum, viridulum, ovoideum circ. 3 mm longum, stylis crassis, stigmatibus majoribus.

云南 (Yunnan): 碧江 (Bijiang, 现属福贡), 武素功 (S. K. Wu) 8794, in fissuris rupium montiorum, alt. 4 350 m. fl. 1964. 9. 12. (Typus! KUN).

产于福贡，生于海拔 4 350 m 左右的山坡岩石隙。

本种花梗被锈色长柔毛、花瓣具 5 脉与 *S. dahaiensis* H. Chuang 相同，但本种花梗长达 1cm；萼片边缘具流苏状缘毛；花瓣椭圆形，长 7～9 mm；叶片狭披针形，边缘生锈色长缘毛，明显具 3 (－5) 脉与之相区别，体态也全然不同。

9 **山箐虎耳草** 新种 图4：1～3

Saxifraga valleculosa H. Chuang, sp. nov.

Saxifraga omphalodifolia var. *callosa* C. Y. Wu ex C. Y. Wu et J. T. Pan in Act. Phytotax. Sinica 28 (1): 59. 1990, quoad T. T. Yu 12707.

Species proxima *S. omphalodifoliae* H.－M. a qua caulibus crispule ferrugineo－eglanduloso－villosis; laminis ovatis usque anguste ovatis; inflorescentiis dense breviter glanduloso－pilosis; floribus minoribus, petalis trinerviis, nervis sub apice confluentibus differt.

Herba perennis, 15－25 cm alta. Caulis singulus erectus, simplex, 1－1.5 mm crassus, crispule ferrugineo－eglanduloso－villosus, apice breviter glanduloso－pilosus. Folia basalia ignota; caulina inferiora minora ovata, longe petiolata, media ovata 1.7－3 cm longa et 1－2 cm lata, basicordata profunde sinu, utrinque et margine ferrugineo－pilosa, petiolis 1－4 cm longis dense crispule ferrugineo－villosis, superiora anguste ovata decrescentia et subsessilia. Inflorescentia cymoso－corymbosa terminata multiflora, ramis 1－3－floris; bracteae anguste ovatae usque anguste ellipticae,

utrinque et margine breviter glanduloso - pilosae; pedicelli 1 - 2 cm longi, dense breviter glanduloso - pilosi. Sepala 5, sub anthesi reflexa, ovata, 3 - 3.5 mm longa, circ. 1.5 mm lata, acuta, extra breviter ferrugineo - glanduloso - pilosa, nervis 3, sub apice confluentibus; petala flava, elliptica 4.5 - 5.5 mm longa, apice obtusa, basi in breviter unguem contracta, nervis 3 sub apice confluentibus; stamina paulo breviora quam petala, filamentis subulatis; ovarium late ovoideum, breviorum quam stamen, stylis brevibus. Capsula ovoidea 5 - 6 mm longa, seminibus numerosis ovatis nitidis.

云南（Yunnan）：德钦（Deqen），王启无（C. W. Wang）64916，俞德浚（T. T. Yu）9122，9283，9506（Typus! KUN），10542，冯国楣（K. M. Feng）5429，5919，6713；贡山（Gongshan），王启无 65205，俞德浚 22299，22484，23180，23214，23244；中甸（Zhongdian），俞德浚 12707，13750，13994；维西（Weisi），俞德浚 10673。

四川（Sichuan）：木里（Muli），青藏队（Qinghai - Xizang Exp.）4082；乡城（Xiangcheng），青藏 13693。

分布于云南西北部和四川西南部，生于海拔（2500 - ）3 000 ~ 4 100 m 的山坡、水边或路旁。

近 *S. omphalodifolia* H. - M.，但本种茎被锈色、卷曲、无腺柔毛；叶片卵形至狭卵形；花序被短腺毛；花较小，花瓣 3 脉于近先端汇合。

10　**泸水虎耳草**　新种　图 4：4 ~ 6

Saxifraga lushuiensis H. Chuang, sp. nov.

Species planta caespitosa, lamina triangulato - ovata utrinque glabra, petiolo cum *S. insolenti* Irmsch. optime congruens; praecipue differt caulibus totis villibus ferrugineis crispatis obsitis; inflorescentis pilis breviter glandulosis rubescentibus obsitis; laminis subter purpureo - rubris.

Herba perennis, 20 - 35 cm alta. Rhizoma breviorum, radices fibrillosas numerosas edens. Caules 4 - 5, erecti, flexuosi, purpureo - rubri, simplices, dense crispule ferrugineo - villosi, folia numerosa subaequilonga edentes. Folia basalia decidua, ovata, mina, longipetiolata; caulina triangulato - ovata, apice acuta, basi truncata raro rotundata quae medio cuneato - decursiva, supra viridia subter rubra, utrimque glabra, margine glabra vel sparsim pilosa, 5 - 7 - basinervia, media 1.5 - 2.8 cm longa 1 - 1.5 mm lata, ad apicem versus sensim decrescentia, omnino petiolata, petiolis 0.3 - 2.5 cm longis, crispule longe ferrugineo - villosis. Inflorescentia corymbosa terminata, multiflora, 5 - 8 cm longa, ramis 2.5 - 4.5 cm longis 1 - 2 - floris; bracteae ovatae vel anguste ovatae vel lanceolatae, margine dense rubro - glanduloso - pilosae; pedicelli 0.5 - 1.4 cm longi, dense rubro - glanduloso - pilosi. Flores actinomorphi; sepala 5, sub anthesi reflexa, ovata vel anguste ovata, 2.5 - 3 mm longa circ. 2mm lata, apice obtusa, extra sparsim breviter rubro - glanduloso - pilosa, margine glabra, trinervia; petala 5, flava, anguste elliptica, 4.5 - 6 mm longa, 2.5 - 3 mm lata, apice rotundata, basi breviter unguiculata, trinervia; stamina 10, 3 - 3.5 mm longa, filamentis subulatis, antheris suborbiculatis; ovarium late ovoideum, 2.7 - 3 mm longum, circ. 2 mm latum, stylis brevissimis, stigmatibus minoribus. Capsula ignota.

云南（Yunnan）：泸水（Lushui），碧江队（Bijiang Exp.）1687, in sylvis frondosis, alt.

图4. 1~3. 山臂虎耳草 *Saxifraga valledullosa* H. Chuang, 1. 植株, 2. 花, 3. 茎生叶; 4~6. 泸水虎耳草 *S. lushuiensis* H. Chuang, 4. 植株, 5. 花, 6. 中部茎生叶。(吴锡麟绘)

2 700 m. fl. 1978. 8. 2. (Typus! KUN).

产于泸水，生于海拔2 700 m的阔叶林下。

本种茎丛生，叶片三角状卵形，两面无毛和具叶柄等特征与 *S. insolens* Irmsch. 相似，不同在于本种茎整个被锈色卷曲柔毛，花序被带红色平展的短腺毛，叶片背面紫红色。

11 **横纹虎耳草** 新变种

Saxifraga subaequifoliata Irmsch. var. ***striata*** H. Chuang, var. nov.

Differt a typo foliis caulinis infra mediorum glabris, petalis transversim aurantiaco - striatis.

云南 (Yunnan): 中甸 (Zhongdian), 中甸队 (Zhongdian Exp.) 1110, 1545, in

paludibus pratis, alt. 3 700 m. fl. 1962. 8. 28. (Typus! KUN)。

产于中甸，生于海拔3 600～3 700m的高山草甸或沼泽草地。

与原变种的区别是中部以下茎生叶无毛；花瓣具橙黄色横纹。

12　**大心虎耳草**　新种　图5：1～3

Saxifraga megacordia C. Y. Wu, sp. nov.

Species valde affinis *S. cardiophyllae* Franch., a qua plantis altiore (40－60 cm) robustiore; laminis majoribus, longe ovato－cordatis, 3.5－4.5 cm longis 1.5－2.5 cm latis; inflorescentiis multifloris, bracteis supra sparsim et margine dense breviter nigro－glanduloso－pilosis; sepalis 2－3 mm longis; petalis 2－2.5 plo longioribus quam sepalis differt.

Herba perennis, 40－60 cm alta. Caulis singulus, erectus, simplex, 2－3 mm crassus, apice breviter nigro－glanduloso－pilosus, cetero glabrus. Folia basalia et inferne caulina marcida sub anthesi, caulina media laminis longe ovato－cordatis, 3.5－4.5 cm longis et 1.5－2.5 cm latis, apice obtusis vel breviter acuminatis, basi cordatis etiam inaequalibus, utrinque et margine glabris, supra nigrescentibus subter cinereis in sicco, petiolis ad 4.5 cm longis, superis sensim sessilibus, margine et in axillis foliorum sparsim ferrugineo－villosis. Inflorescentia multiflora, corymboso－paniculata, ramis 5cm longis 1－3－floris, dense breviter nigro－glanduloso－pilosis; bracteae lanceolatae, supra sparsim et margine dense breviter nigro－glanduloso－pilosae; pedicellus cernuus sub gemma et erectus sub anthesi, dense breviter nigro－glanduloso－pilosus; sepala 5, sub anthesi reflexa, ovata, 2－3 mm longa, circ. 2 mm lata, obtusa, extra sparsim breviter nigro－glanduloso－pilosa, margine glabra, trinervia, nervis liberis; petala 5, flava, elliptica, 5－6 mm longa, 2－3 mm lata, basi breviter unguiculata, trinervia, nervis liberis; stamina 10, circ. 4 mm longa, filamentis subulatis, antheris suborbiculatis; ovarium superum ovoideum, circ. 4 mm longum, stylis brevissimis, stigmatibus parvis.

云南 (Yunnan): 德钦 (Deqen), 冯国楣 (K. M. Feng) 6563 (Typus! KUN).

分布于德钦澜沧江边，生于海拔3 800～4 000 m的草坡上。

近 *S. cardiophylla* Franch.，但本种植株较高大，粗壮；叶片长卵状心形，较大，长3.5～4.5 cm，宽1.5～2.5 cm；花序多花，苞片表面疏被和边缘密被黑色短腺毛；萼片长2～3 mm，花瓣比萼片长2～2.5倍。后者植株高15～20 cm，较纤细；中部叶片宽卵状心形，长2～2.5cm，宽1～1.2 cm；花序少花，苞片仅被长缘毛；萼片长4.5～5 cm；花瓣比萼片长1.5～2倍。

13　**石山虎耳草**　新变种

Saxifraga setulosa C. Y. Wu var. ***gombalana*** C. Y. Wu et H. Chuang, var. nov.

Differt a typo plantis circ. 10cm altis; caulibus pedicellisque crispule ferrugineo－eglanduloso－villosis; laminis majoribus 5－7 mm longis 2－3 mm latis, utrinque glabris; petalis 3－nerviis, sine callosis.

云南 (Yunnan): 贡山 (Gongshan), 碧落雪山 (Bilouxueshan), 毛品一 (P. I. Mao) 410 (Typus! KUN).

分布于贡山碧落雪山，生于海拔3 500 m附近的石山顶岩石上。

图5 1~3. 大心虎耳草 *Saxifraga megacordia* C. Y. Wu
1. 植株上部，2. 植株下部，3. 花；4~6. 横断山虎耳草 *S. hengduanensis* H. Chuang，4. 植株，5. 花瓣，6. 雌蕊和雄蕊（李锡畴、肖溶绘）

与原变种的区别是植株高 10 cm；茎和花梗被锈色卷曲长柔毛，无腺毛混生；叶片较大，长 5~7 mm，宽 2~3 mm，两面无毛；花瓣具 3 脉，无胼胝体。

14 **宽瓣山地虎耳草** 新变型

Saxifraga montana H. Smith f. ***platypetala*** C. Y. Wu, f. nov.

A typo differt petalis late ellipticis vel suborbiculatis, 6 – 7 mm longis, 5 – 6 mm latis; foliis caulinis latioribus, longiovatis vel lanceolatis, 5 – 9 mm latis.

云南 (Yunnan)：德钦 (Deqen)，王启无 (C. W. Wang) 68857，俞德浚 (T. T. Yu) 9174 (Typus! KUN).

分布于云南德钦，生于海拔 3 700~4 150 m 的草坡或山坡石隙。

与原变型的区别是花瓣宽椭圆形至近圆形，长 6~7 mm，宽 5~6 mm；茎生叶较宽，长卵形至披针形，宽 5~9 mm。

15　**横断山虎耳草**　新种　图5：4～6

Saxifraga hengduanensis H. Chuang, sp. nov.

Species *S. nigroglandulosae* Engl. et Irmsch. et *S. tsangchanensi* Franch. affenis, a priore floribus minoribus, sepalis 4－5 mm longis, petalis obovatis vel ellipticis, 6－7.5 mm longis 3－4.5 mm latis, haud callosis; a posteriore sepalis extus margineque longe nigro－glanduloso－pilosis, foliis basalibus latioribus (3－6 mm) differt.

Herba perennis laxe caespitosa, 5－15 cm alta. Radices fibrillosae numerosae lineares. Caules erecti simplices circ. 1mm crassi, inferne glabri, superne nigro－glanduloso－pilosi, laxe foliati. Folia basalia pauca, laminis anguste lanceolatis vel anguste ellipticis, 0.5－1.5 cm longis, 0.2－0.6 cm latis, apice obtusis, basi cuneatis, margine integris, subtus glabris, supra margineque sparsim villosis, pilis luteolis apice brunneis obsitis, petiolis complanatis 1.5－6 cm longis, glabris raro sparsim pilosis, basi in vaginas ampliatis; folia inferne caulina foliis basalibus similia, 1－2 cm longa, 2－3 mm lata, petiolata 1－3 cm longa, superne decrescentia, lineari－lanceolata, breviter petiolata vel sessilis, omnino in axillis foliorum crispule ferrugineo－villosa. Flores 1－2, terminati, bracteis foliiformibus minoribus, nigro－glanduloso－ciliatis, pedicellis 0.5－2 cm longis, dense nigro－glanduloso－pilosis. Sepala 5, erecta, ovata vel ovato－elliptica, 4－5 mm longa circ. 2 mm lata, apica rotundata extus atque margine longe nigro－glanduloso－pilosa, 3－nervia, lateri nervis ramiferis; petala 5, flava, obovata vel elliptica 6－7.5 mm longa 3－4.5 mm lata, apice rotundata basi angustata, inconspicue unguiculata, 5－7－nervia; stamina 10, petalisbreviora, filamentis subulatis, antheris ovatis; ovarium superum oblongo－ovoideum, staminibus breviorum, stylis breviter. Capsulae ovoideae 6－7 mm longae, stylis divergentis, seminibus brunneis minimis.

云南 (Yunnan): 碧江 (Bijiang, 现属福贡), 蔡希陶 (H. T. Tsai) 54137, 58601, 武素功 (S. K. Wu) 8673, 8806; 贡山 (Gongshan), 王启无 (C. W. Wang) 67246, 俞德浚 (T. T. Yu) 20735, 22680, 22773, 冯国楣 (K. M. Feng) 7797, 7908; 德钦 (Deqen), 王启无 69569, 69634, 冯国楣 6645, in fissuris rupium, alt. 3 800～4 000 m. fl. 1940. 8. 14. (Typus! KUN); 维西 (Weisi), 俞德浚 10672。

西藏 (Xizhan): 察隅 (Zayu), 青藏队 (Qinghai－Xizhan Exp.) 10211, 10213, 10684, 10685。

分布于云南西北部（德钦、贡山、福贡、维西）和西藏东南部（察隅），生于海拔3 000～4 300 m的山坡石隙。

本种近黑腺虎耳草 *S. nigroglandulosa* Engl. et Irmsch.，但本种花较小，萼片长4～5 mm，花瓣倒卵形或椭圆形，长6～7.5 mm，宽3～4.5 mm，无胼胝体；与苍山虎耳草 *S. tsangchanensis* Franch. 的区别是萼片外面和边缘被黑色长腺毛，基生叶较宽（3～6 mm）。

16　**多痂虎耳草**　新种　图6：1～6

Saxifraga versicallosa C. Y. Wu, sp. nov.

Species similis *S. chrysanthoidi* Engl. et Irmsch., sed caulibus pilis ferrugineis longiglandulosis obsitis, sepalis sub anthesi non reflexis, petalis intus multicallosis differt.

Herba perennis caespitosa, 2.5－6 (－10) cm alta. Caules erecti vel ascendentes, sim-

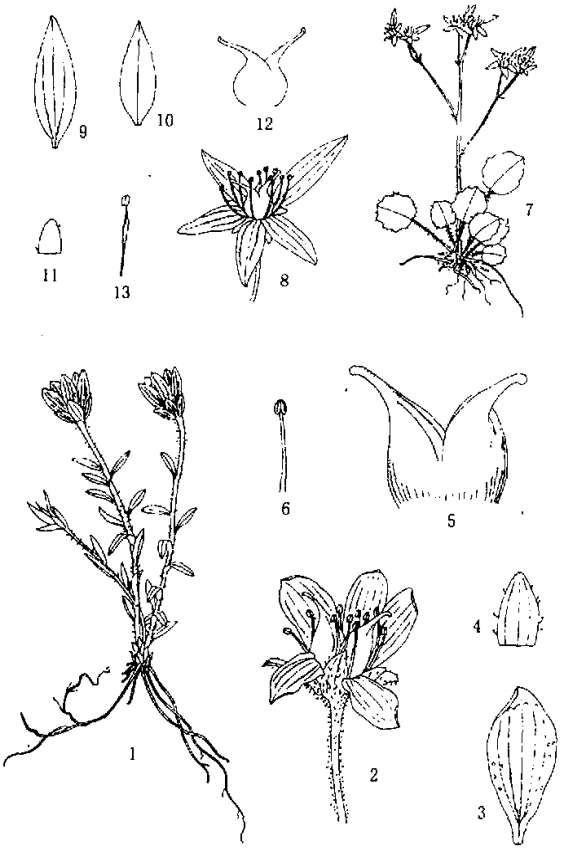

图6 1~6. 多瘤虎耳草 *Saxifraga versicallosa* C. Y. Wu
1. 植株，2. 花，3. 花瓣，4. 萼片腹面，5. 雌蕊，6. 雄蕊；7~13. 景东虎耳草 *S. jingdonensis* H. Chuang，7. 植株，8. 花，9~10. 花瓣，11. 萼片，12. 雌蕊，13. 雄蕊。（吴锡麟绘）

plices, longe ferrugineo - glanduloso - villosi. Folia basalia laxe rosulata, laminis lanceolatis, 3 - 5 mm longis 1 - 1.5 mm latis, apice acutis, basi in late et breviter petiolis angustatis, utrinque glabris, spersim glanduloso - ciliatis; folia caulina lanceolata, 4 - 8 mm longa, 1 - 2 mm lata, apice acuta etiam breviaristata, basi cuneata, utrinque glabra, glanduloso - ciliata, sessilia. Flos solitarius; pedicellus robustus 1 - 1.5 mm longus, dense glanduloso - pilosus; sepala 5, sub anthesi erecta usque patentia, ovata vel ovato - oblonga, 2.5 - 3 mm longa, 1.5 - 2 mm lata, apice rotundata, dorso spersim glanduloso - pilosa, margine sparsim glanduloso - ciliata, trinervia, nervis apice non confluentibus; petala 5, flava, obovata vel anguste obovata, 5.5 - 6.5 mm longa, 2.5 - 4 mm lata, apice rotundata, basi breviter unguiculata, 3 - 5 - nervia, intus versicallosa; stamina

10, 4－5 mm longa, filamentis subulatis; ovarium superum ovoideum, 2－2.5 mm longum, stylis brevibus et crassis divergentibus, stigmatibus majoribus.

云南（Yunnan）：德钦（Deqen），王启无（C. W. Wang）69000, 69032, 69041，俞德浚（T. T. Yu）9814（Typus! KUN）；贡山（Gongshan），俞德浚 19861, 22194, 22287, 22551；中甸（Zhongdian），冯国楣（K. M. Feng）2202. 四川（Sichuan）：稻城（Daocheng），俞德浚 13041。

分布于云南西北部（德钦、贡山、中甸）和四川西南部（稻城），生于海拔3 500～4 200 m的山坡或山箐的石隙间。

本种近 *S. chrysanthoides* Engl. et Irmsch.，但本种茎被锈色长腺毛，萼片在花期不反折，花瓣里面具多数小痂体。

17　**小线叶虎耳草**　新变种

Saxifraga filifolia Anthony var. ***rosettifolia*** C. Y. Wu, var. nov.

Differt a typo plantis minoribus; foliis basalibus 2－3 mm longis, circ. 0.5 mm latis, caulinis 1.5－2 mm longis, circ. 0.5 mm latis, sepalis circ. 1.5 mm longis, petalis 4.5－5.5 mm longis.

云南（Yunnan）：德钦（Deqen），王启无（C. W. Wang）64898（Typus! KUN）.

分布于德钦，生于海拔3 000 m左右的石隙。

与原变种的区别在于植株各部较小，基生叶长2～3 mm，宽约0.5 mm，茎生叶长1.5～2 mm，宽约0.5 mm；萼片长约1.5 mm，花瓣长4.5～5.5 mm。

18　**小叶虎耳草**　新种　图7：1～6

Saxifraga minutifoliosa C. Y. Wu, sp. nov.

Species *S. finitimae* W. W. Smith affinis, sed foliis basalibus atque inferne caulinis laxirosulatis, minoribus, 2－2.5 mm longis, 0.5－1 mm latis, floribus minoribus, sepalis 1.5－2 mm longis, glabris, petalis anguste ellipticis, 4.5－5.5 mm longis, glabris, trinervis differt.

Herba gracilia, 3－5 cm alta. Caulis erectus, saepe simplex, circ. 0.5 mm crassus, inferne glabrus et folia laxirosulata edens, superne breviter glanduloso－pilosus atque 1－2 foliatus. Folia anguste oblonga vel anguste lanceolata, 2－2.5 mm longa, 0.5－1 mm lata, apice acuta etiam breviaristata, basi cuneata, utrinque glabra margine albo－glanduloso－ciliata（glandulis saepe decicuis），uninervia, sessilia. Flos solitarius; pedicellus erectus, 1.5－3 cm longus, sparsim breviter glanduloso－pilosus; sepala 5, aub anthesi reflexa, oblonga 1.5－2 mm longa circ. 1 mm lata, apice rotundata, glabra, trinervia, nervis apice in verrucuam confluentibus; petala 5, flava, anguste elliptica, 4.5－5.5 mm longa, 1.5－2 mm lata, trinervis; stamina 10, 2.2－2.7 mm longa, filamentis subulatis, antheris orbioulatis; ovarium superum late ovoideum, breviorum quam stamen, stylis brevioribus erectis.

云南（Yunnan）：贡山（Gongshan），王启无（C. W. Wang）67110, 67257，俞德浚（T. T. Yu）20065（Typus! KUN），20648.

产于贡山，生海拔3 000～3 400 m的山坡或山顶石缝。

本种近 *S. finitima* W. W. Smith，但本种基生叶和下部茎生叶疏松的莲座状，叶较小，长2～2.5 mm，宽0.5～1 mm；花较小，萼片长1.5～2 mm，无毛，花瓣狭椭圆形，长

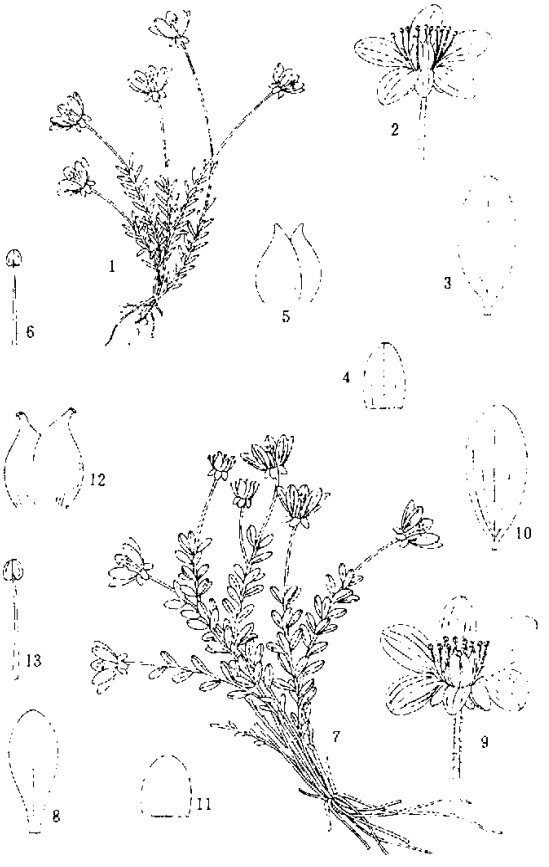

图7 1~6. 小叶虎耳草 *Saxifraga minutifoliosa* C. Y. Wu
1. 植株，2. 花，3. 花瓣，4. 萼片，5. 雌蕊，6. 雄蕊；7~13. 东旺虎耳草 *S. dongwangensis* H. Chuang，7. 植株，8. 叶，9. 花，10. 花瓣，11. 萼片，12. 雌蕊，13. 雄蕊。（吴锡麟绘）

4.5~5.5 mm，具3脉。

19 **大金星虎耳草** 新变种

Saxifraga stella – aurea Hook. f. et Thoms. var. ***macrostellata*** H. Chuang, var. nov.

Differt a typo floribus majoribus, sepalis 3 – 4 mm longis, petalis 6 – 8 mm longis; foliis oblongis majoribus.

云南 (Yunnan): 贡山 (Gongshan), 冯国楣 (K. M. Feng) 7774, in fissuris rupium, alt. 3 700~3 900 m. fl. 1940. 9. 15. (Typus! KUN).

西藏 (Xizhan): 察隅 (Zayu), 青藏队 (Qinghai – Xizhan Exp.) 10202.

产于云南西北部和西藏东南部，生于海拔3 700~4 200 m的流石滩石隙。

与原变种的区别在于花较大，萼片长 3～4 mm，花瓣长 6～8 mm；叶片长圆形，较大。

20　**东旺虎耳草**　新种　图 7：7～13

Saxifraga dongwanensis H. Chuang, sp. nov.

Proxima *S. atuntsiensi* W. W. Smith, a qua differt foliis 3－5 mm longis; sepalis sub anthesi reflexis 2－2.5 mm longis, petalis anguste ellipticis 6－7 mm longis; pedicellis sparsim albo－puberulis.

Herba perennis dense caespitosa, circ. 6 cm alta Caules erecti vel assurgentes, inferne glabri et folia laxirosulata endentes, superne albo－puberuli aphylli. Folia obovata 3－5mm longa 1.5－2 mm lata, carnosula, apice obtusa basi angustata, utrimque et margine glabra, sessiles. Flores solitarii terminati, raro 2－flori; pedicelli erecti, circ. 1.5 cm longi, sparsim albo－puberuli. Sepala 5, sub anthesi reflexa, ovata 2－2.5 mm longa 1.5－2 mm lata, apice obtusa, glabra, trinervia; petala 5, flavida, anguste elliptica, 6－7mm longa, 2.5－2 mm lata, apice obtusa, basi unguiculata, quinquinervia; stamina 10, longitudine 1/2 petali partes aequantia, filamentis subulatis, antheris suborbiculatis; ovarium superum ovoideum, breviorum quam stamen, stylis brevioribus 0.5－1 mm longis, crassiusculis, suberectis, stigmatibus minoribus. Capsula ovaidea circ. 4 mm longa, stylis divergentibus.

云南（Yunnan）：中甸（Zhongdian），东旺（Dongwan），杨竞生（J. S. Yang）828，fl. fr. 1976. 8. 1.（Typus! KUN）.

产于中甸东旺公社。

近德钦虎耳草 *S. atuntsiensis* W. W. Smith，但本种叶片长 3～5 mm；萼片在花期反折，长 2～2.5 mm；花瓣狭椭圆形，长 6～7 mm；花梗疏被白色微柔毛。后者叶片长约 1 mm，萼片先直立后伸展，长 1～1.5 mm；花瓣线状长圆形，长 3～4 mm；花梗散生腺绒毛。

21　**具小叶虎耳草**　新变种

Saxifraga mengtzeana Engl. et Irmsch. var. ***foliolata***.

Differt a typo foliis basalibus imis 2－5－foliolatis edentibus; laminis foliolorum suborbiculatis 0.7－2 cm diam., utrinque glabris, margine repando－crenatis etiam longe ferrugineo－ciliatis, petiolis brevioribus quam laminis, dense ferrugineo－villosis.

云南（Yunnan）：屏边（Pingbian）王启无，（C. W. Wang）82165，82433（Typus! KUN）；麻栗坡（Malipo），冯国楣（K. M. Feng）12638.

分布于云南东南部（屏边、麻栗坡），生于海拔 1 500～1 700 m 的林下或灌丛下石隙。

与原变种的区别是基生叶片基部和叶柄先端相接处生 2～5 枚小叶；小叶片近圆形，直径 0.7～2 cm，两面无毛，边缘具浅波状齿且生锈色长缘毛；叶柄比叶片短、密生锈色长柔毛。

22　**景东虎耳草**　新种　图 6：7～13

Saxigraga jingdongensis H. Chuang, sp. nov.

Saxifraga veitchiana auct. non Balf. f.：云南种子植物名录 246. 1984, quoad P. Y. Chiou 53451.

Species *S. mengtzeanae* Engl. et Irmsch. similis, a qua differt plantis valde gracilioribus; foliis minimis dorso haud purpuratis saepe emaculatis, basi rotundatis vel trancatis vel subcordatis, nervis inconspicuis; inflorescentiis breviter modo 4 – 6 – floris; sepalis sub anthesi patentibus, petalis minoribus.

Herba perennis 5 – 10 cm alta. Caules erecti simpleces 0.3 – 0.5 mm crassi, sparsim glanndulosо – pilosi, bracteis foliaceis 1 – 3. Folia basalia numerosa, laminis late ovatis vel suborbiculatis, 0.4 – 1.8 cm longis, 0.4 – 1.6 cm latis, carnosis, basi rotundalis vel trancatis vel subcordatis, utrinque glabris, margine 5 – 8 – repando – dentatis, longe glanduloso – ciliatis, supra viridibus, subtus flavovirentibus saepe haud maculatis, nervis inconspicuis, petiolis 1 – 3 cm longis dense glanduloso – villosis; *folia caulina anguste lanceolata, 1.5 – 2 mm longa, margine glanduloso – villosa*, sessilia. Inflorescentia terminata, cymoso – paniculata, 2 – 5 cm longa, 4 – 6 – flora; bractea anguste lanceolata vel lanceolato – linearia, 1 – 2 mm longa, apice obtusa, margine sparsim glanduloso – ciliata; pedicellus circ. 1cm longus breviter glanduloso – pilosus. Flores zygomorphi; sepala 5, patentia, anguste ovata, 2 – 2.5 mm longa, apice obtusa, margine sparsim breviter glanduloso – pilosa vel *glabriuscula, univervia gracillima*; petala 5, roseola, *inaequilonga*, unipetalis majoribus linearilanceolatis, 0.5 – 1 cm longis, 1.5 – 2 mm latis, apice obtusis, basi angustatis, trinervis gracillimis, quadripetalis minoribus lanceolatis vel ovato – lanceolatis, 4 – 5 mm longis, apice obtusis, basi breviter unguiculatis, nervis inconspicuis; stamina 10, clavata circ. 3 mm longa; ovarium superum ovoideum circ. 1.5 mm longum, stylis erectis gracilibusque, ovariis subaequilongis.

云南 (Yunnan): 景东 (Jingdong), 邱炳云 (P. Y. Chiou) 53451 (Typus! KUN).

产云南景东无量山，生于海拔 2 300 m 附近的湿润岩石上。

本种近 *S. mengtzeana* Engl. et Irmsch.，但植株远较纤细；叶极小，背面不带紫色，通常无斑点、基部圆、截形或微心形，叶脉不明显；花序短，仅具 4 ~ 6 花，萼片在花期伸展、花瓣较小。

23 **斑纹长瓣梅花草** 新变种

Parnassia longipetala Hand. – Mazz. var. ***striata*** H. Chuang, var. nov.

Parnassia longipetala auct. non Hand. – Mazz.: Ku, 植物研究 7 (1): 22. 1987, quoad C. W. Wang 68379, K. M. Feng 6710.

Differt a typo petalis et sepalis et dorsis foliorum dense fusco – striatis.

云南 (Yunnan): 维西 (Weixi), 王启无 (C. W. Wang) 63828, 64500, 68379, 冯国楣 (K. M. Feng) 4325, 4717; 德钦 (Deqen), 6710 (Typus! KUN).

西藏 (Xizhan): 察瓦龙 (Chawalong), 王启无 66222。

分布于云南西北部 (德钦、维西) 和西藏东南部 (察瓦龙)，生于海拔 2 700 ~ 3 900 m 的杂木林下或山坡。

与原变种的区别在于花瓣、花萼和叶背密具褐色斑纹。

24 **白花长瓣梅花草** 新变种

Parnassia longipetala Hand. – Mazz. var. ***alba*** H. Chuang, var. nov.

Parnassia longipetala auct. non Hand. – Mazz.: Ku, 植物研究 l. c. (1987), quoad T.

T. Yu 23233.

A typo differt petalis albis, punctulis leviter procurrentibus fusco - puncticulatis dense ornatis.

云南 (Yunnan)：贡山 (Gongsha)，俞德浚 (T. T. Yu) 23233 (Typus! KUN).

分布于云南贡山，生于海拔 3 900 m 附近的山坡草地。

与原变种的区别在于花瓣白色，密具微突起的褐色小点。

25　**短毛岩白菜**　新变种

Bergenia purpurascens (Hook. f. et Thoms.) Engl. var. ***sessilis*** H. Chuang, var. nov.

A typo differt inflorescentiis et pedicellis calycibusque pilis glanduliferis sessilibus dense instructis.

与原变种的区别在于花序、花梗和花萼密被无柄腺毛。

云南 (Yunnan)：丽江 (Lijiang)，王启元 (C. W. Wang) 71179，俞德浚 (T. T. Yu) 15203，秦仁昌 (R. C. Ching) 30183，青藏队 (Qinghai - Xizang Exp.) 316；中甸 (Zhongdian)，俞德浚 11487，13549，冯国楣 (K. M. Feng) 1118，in silvis，fl. 1939. 5. 29. (Typus! KUN)，中甸队 (Zhongdian Exp.) 1331，63 - 2440；鹤庆 (Heqing)，秦仁昌 23994。

四川 (Sichuan)：九龙 (Jiulong)，黄治平等 (Z. P. Huang *et al.*) 218；木里 (Muli)，俞德浚 5510，5727。

分布于云南西北部 (中甸、丽江、鹤庆) 和四川西南部 (木里、九龙)，生于海拔 2 600 ~ 4 100 m的林下、灌丛下、草地或石隙。

本变种与分布于新疆和前苏联、蒙古、朝鲜的厚叶岩白菜 (*B. crassifolia* (L.) Fritsch) 的区别是花较大，花瓣长 1.2 ~ 2 cm，腺毛密，后者花瓣长 0.7 ~ 0.8 cm，腺毛疏生。